Higher Hog Prices Mostly Offset by Higher Feed Costs in 1996

Higher hog prices during 1996 led to an increased value of hog production that was mostly offset by higher feed costs. Market hog prices ranged from \$50 to \$60 per cwt during much of 1996, up from \$40 to \$50 in 1995. Feeder pig prices were also up sharply from 1995 levels, mostly in the \$70-\$80 range. However, the higher corn and soybean prices that benefited crop producers offset much of the additional income from higher hog prices. Feed costs rose about 30 percent for all producer types. Average returns above cash costs improved for market hog producers, but changed little for feeder pig operations. Residual returns to management and risk changed little among hog producers and remained negative as they have since 1992. Negative average farm returns to resources used in the hog sector help explain the continually declining number of hog operations.

Farrow-to-finish hog producers in both the North and South benefited from much higher market hog prices in 1996, but paid higher feed costs. Feed costs were up about 30 percent in both regions as corn and soybean prices soared. However, the greater value of hog production improved both cash and residual returns to farrow-to-finish production in both regions. Southern producers pay more for feed than northern producers, due mainly to fewer local supplies, but have similar returns because of somewhat higher production values. Much of this is due to a positive inventory change in the South, indicating expanded production, compared with a decline in the North.

Despite higher feeder pig prices in 1996, returns to feeder pig production were down in both the North and South as feeder pigs continued to be the lowest returning hog enterprise. Feeder pig prices in the South lagged those in the North, where the value of feeder pig production rose nearly 20 percent compared with only 10 percent in the South. However, higher feed costs offset much of the increased value in both regions. Cash returns in 1996 were mostly unchanged from 1995, but returns above economic costs were about \$3 per cwt lower among northern growers, and \$8 lower in the South. Continued poor returns to feeder pig production suggest a greater decline in this specialty relative to other hog producer types.

In contrast to feeder pig production, feeder pig finishing produced improved returns in 1996, particularly in the South. Higher market hog prices pushed the value of finished hogs up 25 percent in both the North and South. Higher feed costs were somewhat offsetting, but cash and economic returns to feeder pig finishing moved higher in both regions. Cash returns improved nearly \$3 per cwt in the North and nearly \$9 in the South. Likewise, returns above economic costs were up about \$1 in the North, but more than \$7 in the South. Newer, larger, and more efficient operations characterize hog finishing in the South and likely account for the region's lower costs. Among all hog enterprises, only feeder pig finishing in the South showed a positive residual return to management and risk at about \$5 per cwt. This helps explain the continued growth of contract hog finishing in the South relative to other hog enterprises.

Figure 8-14 **Hog production regions**



Notes: Shading and patterns indicate production regions where producers were surveyed in 1992 about production practices and costs of production.

Table 8-14A—Hog production cash costs and returns, 1995-96

Item	United	States	No	rth	Sou	ıth		
	1995	1996	1995	1996	1995	1996		
	Dollars per cwt gain ¹							
Gross value of production:								
Market hogs	38.45	48.87	38.03	48.31	40.01	50.69		
Feeder pigs	4.57	5.17	4.58	5.28	4.55	4.83		
Cull stock	2.22	3.02	2.19	3.02	2.31	3.04		
Breeding stock	2.01	2.63	2.19	2.92	1.35	1.69		
Inventory change	-0.20	-0.84	-0.58	-1.38	1.20	0.94		
Other income ²	1.32	1.31	1.42	1.43	0.93	0.93		
Total, gross value of production	48.37	60.16	47.83	59.58	50.35	62.12		
Cash expenses:								
Feed—								
Grain	12.28	17.25	12.58	17.86	11.20	15.24		
Protein sources	7.96	10.48	8.34	11.29	6.56	7.82		
Complete mixes	5.83	7.08	4.74	5.67	9.78	11.70		
Other feed items ³	0.56	0.67	0.66	0.80	0.20	0.22		
Total, feed costs	26.63	35.48	26.32	35.62	27.74	34.98		
Other—								
Feeder pigs	3.31	3.81	3.04	3.58	4.31	4.58		
Veterinary and medicine	1.41	1.41	1.55	1.57	0.89	0.89		
Bedding and litter	0.08	0.08	0.10	0.10	0.02	0.02		
Marketing	0.59	0.59	0.55	0.56	0.72	0.70		
Custom services and supplies	0.50	0.51	0.46	0.47	0.63	0.64		
Fuel, lube, and electricity	1.58	1.83	1.56	1.84	1.65	1.78		
Repairs	1.40	1.41	1.43	1.45	1.28	1.28		
Hired labor	2.55	2.74	2.54	2.78	2.56	2.63		
Total, variable cash expenses	38.05	47.86	37.55	47.97	39.80	47.50		
General farm overhead	1.91	1.59	2.07	1.72	1.35	1.14		
Taxes and insurance	1.06	1.03	1.09	1.06	0.98	0.95		
Interest	3.00	2.65	3.25	2.90	2.07	1.83		
Total, fixed cash expenses	5.97	5.27	6.41	5.68	4.40	3.92		
Total, cash expenses	44.02	53.13	43.96	53.65	44.20	51.42		
Gross value of production less cash expenses	4.35	7.03	3.87	5.93	6.15	10.70		

Table 8-14B—Hog production economic costs and returns, 1995-96

ltem United 1995	United	United States		orth	Sou	ıth	
	1995	1996	1995	1996	1995	1996	
	Dollars per cwt gain ¹						
Gross value of production:							
Market hogs	38.45	48.87	38.03	48.31	40.01	50.69	
Feeder pigs	4.57	5.17	4.58	5.28	4.55	4.83	
Cull stock	2.22	3.02	2.19	3.02	2.31	3.04	
Breeding stock	2.01	2.63	2.19	2.92	1.35	1.69	
Inventory change	-0.20	-0.84	-0.58	-1.38	1.20	0.94	
Other income ²	1.32	1.31	1.42	1.43	0.93	0.93	
Total, gross value of production	48.37	60.16	47.83	59.58	50.35	62.12	
Economic (full ownership) costs:							
Variable cash expenses	38.05	47.86	37.55	47.97	39.80	47.50	
General farm overhead	1.91	1.59	2.07	1.72	1.35	1.14	
Taxes and insurance	1.06	1.03	1.09	1.06	0.98	0.95	
Capital replacement	11.26	11.76	11.15	11.49	11.69	12.64	
Operating capital	1.06	1.22	1.05	1.22	1.11	1.21	
Other nonland capital	4.09	4.07	3.93	3.84	4.70	4.83	
Land	0.21	0.22	0.24	0.25	0.12	0.13	
Unpaid labor	4.93	5.17	5.15	5.48	4.12	4.16	
Total, economic (full ownership) costs	62.57	72.92	62.23	73.03	63.87	72.56	
Residual returns to management and risk	-14.20	-12.76	-14.40	-13.45	-13.52	-10.44	

¹Cwt gain = (cwt sold - cwt purchased) + cwt inventory change.
²Value of manure production.

³Milk replacer, milk, milk byproducts, antibiotics, and other medicated additives.

Source: Economic Research Service, U.S. Department of Agriculture.

Table 8-15A—Farrow-to-finish production cash costs and returns, 1995-96

Item	United	States	No	rth	th Sout			
	1995	1996	1995	1996	1995	1996		
	Dollars per cwt gain ¹							
Gross value of production:								
Market hogs	39.76	50.37	39.60	50.18	40.39	51.03		
Feeder pigs	0.41	0.46	0.39	0.45	0.48	0.51		
Cull stock	2.06	2.83	2.16	2.99	1.65	2.25		
Breeding stock	0.17	0.24	0.14	0.21	0.26	0.35		
Inventory change	-0.26	-0.95	-0.61	-1.42	1.09	0.73		
Other income ²	1.38	1.38	1.48	1.48	1.00	1.00		
Total, gross value of production	43.52	54.33	43.16	53.89	44.87	55.87		
Cash expenses:								
Feed—								
Grain	12.85	18.14	12.61	17.94	13.74	18.85		
Protein sources	8.68	11.48	8.70	11.81	8.60	10.31		
Complete mixes	4.19	5.12	3.50	4.23	6.86	8.28		
Other feed items ³	0.54	0.64	0.61	0.73	0.28	0.32		
Total, feed costs	26.26	35.38	25.42	34.71	29.48	37.76		
Other—								
Feeder pigs	0.13	0.15	0.15	0.18	0.05	0.05		
Veterinary and medicine	1.22	1.25	1.29	1.32	0.98	0.98		
Bedding and litter	0.06	0.06	0.07	0.07	0.02	0.02		
Marketing	0.47	0.48	0.45	0.46	0.56	0.54		
Custom services and supplies	0.42	0.43	0.40	0.40	0.51	0.51		
Fuel, lube, and electricity	1.50	1.75	1.44	1.72	1.73	1.88		
Repairs	1.38	1.40	1.40	1.42	1.33	1.34		
Hired labor	2.29	2.52	2.18	2.45	2.68	2.75		
Total, variable cash expenses	33.73	43.42	32.80	42.73	37.34	45.83		
General farm overhead	1.70	1.41	1.80	1.50	1.31	1.11		
Taxes and insurance	0.96	0.94	0.98	0.96	0.88	0.85		
Interest	2.68	2.38	2.91	2.61	1.77	1.55		
Total, fixed cash expenses	5.34	4.73	5.69	5.07	3.96	3.51		
Total, cash expenses	39.07	48.15	38.49	47.80	41.30	49.34		
Gross value of production less cash expenses	4.45	6.18	4.67	6.09	3.57	6.53		

Table 8-15B—Farrow-to-finish production economic costs and returns, 1995-96

Item	United	United States		North Sou		ıth
	1995	1996	1995	1996	1995	1996
Market hogs	39.76	50.37	39.60	50.18	40.39	51.03
Feeder pigs	0.41	0.46	0.39	0.45	0.48	0.51
Cull stock	2.06	2.83	2.16	2.99	1.65	2.25
Breeding stock	0.17	0.24	0.14	0.21	0.26	0.35
Inventory change	-0.26	-0.95	-0.61	-1.42	1.09	0.73
Other income ²	1.38	1.38	1.48	1.48	1.00	1.00
Total, gross value of production	43.52	54.33	43.16	53.89	44.87	55.87
Economic (full ownership) costs:						
Variable cash expenses	33.73	43.42	32.80	42.73	37.34	45.83
General farm overhead	1.70	1.41	1.80	1.50	1.31	1.11
Taxes and insurance	0.96	0.94	0.98	0.96	0.88	0.85
Capital replacement	10.95	11.37	10.90	11.19	11.13	12.01
Operating capital	0.94	1.11	0.92	1.09	1.04	1.16
Other nonland capital	3.98	3.94	3.87	3.78	4.40	4.51
Land	0.22	0.23	0.24	0.26	0.12	0.13
Unpaid labor	4.75	4.97	4.90	5.18	4.16	4.22
Total, economic (full ownership) costs	57.23	67.39	56.41	66.69	60.38	69.82
Residual returns to management and risk	-13.71	-13.06	-13.25	-12.80	-15.51	-13.95

¹Cwt gain = (cwt sold - cwt purchased) + cwt inventory change.

²Value of manure production.

³Milk replacer, milk, milk byproducts, antibiotics, and other medicated additives.

Source: Economic Research Service, U.S. Department of Agriculture.

Table 8-16A—Farrow-to-feeder pig production cash costs and returns, 1995-96

Item	United	States	North		South			
	1995	1996	1995	1996	1995	1996		
	Dollars per cwt gain ¹							
Gross value of production:								
Market hogs	0.92	1.16	1.01	1.30	0.65	0.80		
Feeder pigs	62.08	72.12	62.46	74.52	60.95	65.74		
Cull stock	5.32	7.24	5.13	6.99	5.89	7.89		
Breeding stock	0.11	0.15	0.13	0.18	0.06	0.07		
Inventory change	0.02	-0.48	-0.23	-0.89	0.78	0.61		
Other income ²	1.43	1.45	1.47	1.50	1.29	1.30		
Total, gross value of production	69.88	81.64	69.97	83.60	69.62	76.41		
Cash expenses:								
Feed—								
Grain	14.19	19.86	16.68	23.93	6.71	9.01		
Protein sources	8.33	10.75	9.60	12.77	4.50	5.37		
Complete mixes	15.19	19.26	10.25	12.77	30.02	36.55		
Other feed items ³	0.68	0.81	0.85	1.04	0.17	0.19		
Total, feed costs	38.39	50.68	37.38	50.51	41.40	51.12		
Other—								
Feeder pigs	0.03	0.04	0.04	0.06	0.01	0.01		
Veterinary and medicine	4.89	4.78	5.67	5.60	2.56	2.60		
Bedding and litter	0.20	0.21	0.26	0.27	0.04	0.04		
Marketing	2.76	2.85	2.34	2.45	4.03	3.92		
Custom services and supplies	1.47	1.57	0.99	1.03	2.90	3.01		
Fuel, lube, and electricity	4.67	5.38	4.59	5.39	4.89	5.36		
Repairs	2.90	2.90	3.16	3.21	2.11	2.06		
Hired labor	7.44	7.89	6.22	6.44	11.09	11.75		
Total, variable cash expenses	62.75	76.30	60.65	74.96	69.03	79.87		
General farm overhead	3.44	2.94	3.44	2.94	3.44	2.93		
Taxes and insurance	2.21	2.20	2.02	1.98	2.80	2.77		
Interest	5.91	5.38	5.37	4.82	7.51	6.87		
Total, fixed cash expenses	11.56	10.52	10.83	9.74	13.75	12.57		
Total, cash expenses	74.31	86.82	71.48	84.70	82.78	92.44		
Gross value of production less cash expenses	-4.43	-5.18	-1.51	-1.10	-13.16	-16.03		

Table 8-16B—Farrow-to-feeder pig production economic costs and returns, 1995-96

ltem _	United	United States North S		Sou	uth	
	1995	1996	1995	1996	1995	1996
Gross value of production:						
Market hogs	0.92	1.16	1.01	1.30	0.65	0.80
Feeder pigs	62.08	72.12	62.46	74.52	60.95	65.74
Cull stock	5.32	7.24	5.13	6.99	5.89	7.89
Breeding stock	0.11	0.15	0.13	0.18	0.06	0.07
Inventory change	0.02	-0.48	-0.23	-0.89	0.78	0.61
Other income ²	1.43	1.45	1.47	1.50	1.29	1.30
Total, gross value of production	69.88	81.64	69.97	83.60	69.62	76.41
Economic (full ownership) costs:						
Variable cash expenses	62.75	76.30	60.65	74.96	69.03	79.87
General farm overhead	3.44	2.94	3.44	2.94	3.44	2.93
Taxes and insurance	2.21	2.20	2.02	1.98	2.80	2.77
Capital replacement	25.13	27.25	22.93	24.11	31.73	35.58
Operating capital	1.75	1.94	1.70	1.91	1.93	2.03
Other nonland capital	8.46	8.70	7.59	7.54	11.06	11.77
Land	0.44	0.48	0.44	0.47	0.44	0.49
Unpaid labor	10.48	11.38	10.76	11.96	9.64	9.84
Total, economic (full ownership) costs	114.66	131.19	109.53	125.87	130.07	145.28
Residual returns to management and risk	-44.78	-49.55	-39.56	-42.27	-60.45	-68.87

¹Cwt gain = (cwt sold - cwt purchased) + cwt inventory change.
²Value of manure production.

³Milk replacer, milk, milk byproducts, antibiotics, and other medicated additives.

Source: Economic Research Service, U.S. Department of Agriculture.

Table 8-17A—Feeder pig-to-finish production cash costs and returns, 1995-96

Item	United	States	North		South				
	1995	1996	1995	1996	1995	1996			
	Dollars per cwt gain ¹								
Gross value of production:									
Market hogs	52.82	66.89	53.00	67.24	52.41	66.20			
Feeder pigs	0.05	0.05	0.05	0.05	0.05	0.05			
Cull stock	0.02	0.03	0.01	0.01	0.04	0.06			
Breeding stock	0.01	0.01	0.01	0.02	0.00	0.00			
Inventory change	0.18	-0.46	-0.52	-1.52	1.74	1.62			
Other income ²	1.06	1.05	1.30	1.32	0.51	0.51			
Total, gross value of production	54.14	67.57	53.85	67.12	54.75	68.44			
Cash expenses:									
Feed—									
Grain	9.66	13.37	11.44	16.26	5.69	7.67			
Protein sources	4.65	6.11	5.47	7.48	2.81	3.40			
Complete mixes	8.33	9.89	6.60	7.65	12.22	14.32			
Other feed items ³	0.32	0.39	0.45	0.55	0.05	0.06			
Total, feed costs	22.96	29.76	23.96	31.94	20.77	25.45			
Other—									
Feeder pigs	17.71	20.11	17.94	21.22	17.19	17.91			
Veterinary and medicine	0.75	0.73	0.95	0.95	0.30	0.29			
Bedding and litter	0.11	0.11	0.16	0.16	0.00	0.00			
Marketing	0.44	0.44	0.45	0.45	0.42	0.41			
Custom services and supplies	0.40	0.42	0.35	0.36	0.53	0.54			
Fuel, lube, and electricity	0.76	0.86	0.75	0.88	0.78	0.83			
Repairs	0.90	0.90	1.02	1.04	0.62	0.61			
Hired labor	0.79	0.88	0.98	1.14	0.37	0.36			
Total, variable cash expenses	44.82	54.21	46.56	58.14	40.98	46.40			
General farm overhead	1.60	1.32	1.81	1.52	1.11	0.93			
Taxes and insurance	1.02	0.99	1.05	1.03	0.94	0.91			
Interest	3.12	2.75	3.58	3.21	2.10	1.84			
Total, fixed cash expenses	5.74	5.06	6.44	5.76	4.15	3.68			
Total, cash expenses	50.56	59.27	53.00	63.90	45.13	50.08			
Gross value of production less cash expenses	3.58	8.30	0.85	3.22	9.62	18.36			

Table 8-17B—Feeder pig-to-finish production economic costs and returns, 1995-96

	United	States	No	North S		South	
	1995	1996	1995	1996	1995	1996	
Gross value of production:							
Market hogs	52.82	66.89	53.00	67.24	52.41	66.20	
Feeder pigs	0.05	0.05	0.05	0.05	0.05	0.05	
Cull stock	0.02	0.03	0.01	0.01	0.04	0.06	
Breeding stock	0.01	0.01	0.01	0.02	0.00	0.00	
Inventory change	0.18	-0.46	-0.52	-1.52	1.74	1.62	
Other income ²	1.06	1.05	1.30	1.32	0.51	0.51	
Total, gross value of production	54.14	67.57	53.85	67.12	54.75	68.44	
Economic (full ownership) costs:							
Variable cash expenses	44.82	54.21	46.56	58.14	40.98	46.40	
General farm overhead	1.60	1.32	1.81	1.52	1.11	0.93	
Taxes and insurance	1.02	0.99	1.05	1.03	0.94	0.91	
Capital replacement	7.68	8.00	7.79	8.06	7.42	7.87	
Operating capital	1.25	1.38	1.30	1.48	1.14	1.18	
Other nonland capital	3.00	3.00	2.82	2.77	3.43	3.46	
Land	0.10	0.10	0.12	0.12	0.05	0.06	
Unpaid labor	4.18	4.36	4.78	5.12	2.84	2.85	
Total, economic (full ownership) costs	63.65	73.36	66.23	78.24	57.91	63.66	
Residual returns to management and risk	-9.51	-5.79	-12.38	-11.12	-3.16	4.78	

 ¹Cwt gain = (cwt sold - cwt purchased) + cwt inventory change.
 ²Value of manure production.
 ³Milk replacer, milk, milk byproducts, antibiotics, and other medicated additives.

Source: Economic Research Service, U.S. Department of Agriculture.